

DETAILED ACTION

The examiner notes the receipt of the amendments and remarks received in the office on 1/28/2008. Claims 1-7 are pending and are being examined on the merits herein.

Response to Remarks

Applicant's arguments filed 1/28/2008 regarding 35 U.S.C 103 rejection of claims 1-7 under 35 U.S.C. 103(a) as being unpatentable over Kimura et al. (U.S. 5,676,938) in view of Halloran (US 5,085,859) and further in view of Kanemaru et al. (EP 1116753) have been fully considered and found not to be persuasive. The office action is made final.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura et al. (U.S. 5,676,938) in view of Halloran (US 5,085,859) and further in view of Kanemaru et al. (EP 1116753).

Kimura et al. teaches a cosmetic composition comprising a silicone resin, a polysilesquioxane of $R^1Si(O)_{1.5}$ units wherein R^1 represents a substituted or unsubstituted hydrocarbon group that includes an alkyl group (methyl, ethyl, propyl and butyl) for foundation, pressed powder etc (col.2, lines 47-49, col. 5, lines 42-67). The reference further teaches that the composition includes pigments and other cosmetically acceptable ingredients (col.6, lines 3-67).

Kimura et al. et al. do not teach coating of the cosmetic powder with silicone polymer and the weight of cosmetic powder phase and that of the silesquioxane polymers.

Kanemaru et al. teaches a cosmetic powder (0.3-50% by weight) coated with a silicone (0.1-20% by weight) compound and polymerizing the silicone on the surface thereof by heat treatment (Abstract, p2, lines 5-11). The reference teaches that the coating composition enable stability of the products (p 4, para 0031).

Kimura et al. and Kanemaru et al. do not teach the silesquioxane polymers with hydroxyl and alkoxy groups.

Halloran et al. teaches a cosmetic composition such as hair treating composition comprising silesquioxane polymers with hydroxyl and alkoxy groups. The reference teach that the interpenetrating polymer network contains a silesquioxane polymer

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consisting of $\text{RSiO}_{1.5}$ and hydroxyl, alkoxy derivatives thereof with solvent can be applied to the hair as a mixture (col. 4, lines 9-65).

It would have been obvious to one of ordinary skill in the art to make a cosmetic powder coated with silsesquioxane polymers because Kanemaru teach silicone treated powder composition is stable. It would have been obvious to one of ordinary skill in the art to make a cosmetic powder coated with silsesquioxane polymers with such weight composition as in claims 2 and 3 of the instant application because Kanemaru et al. teaches that the silicone treated powder with a composition of 0.3-50% by weight powder coated with a silicone, 0.1-20% by weight is water repellent and can be formulated to various cosmetics and has superior stability.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use silsesquioxane polymers with hydroxyl and alkoxy groups in a cosmetic powder composition coated with silsesquioxane as taught by Kanemaru because Halloran teaches a cosmetic composition comprising silsesquioxane polymers with hydroxyl and alkoxy groups as an interpenetrating polymer network. One of ordinary skill in the art would have been motivated in expectation of success because Halloran teaches the use of silsesquioxane polymers with hydroxyl and alkoxy groups as an interpenetrating polymer network and thus would provide stability.

Kimura et al., Halloran et al. and Kanemaru et al. do not teach the molar ratio of the polymer with the hydrocarbon groups and the molar ratio of the copolymer.

The examiner respectfully points out the following from MPEP 2144.05: "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to

discover the optimum or workable ranges by routine experimentation.” *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955); see also *Peterson*, 315 F.3d at 1330, 65 USPQ2d at 1382 (“The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages.”); *In re Hoeschele*, 406 F.2d 1403, 160 USPQ 809 (CCPA 1969); *Merck & Co. Inc. v. Biocraft Laboratories Inc.*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989); *In re Kulling*, 897 F.2d 1147, 14 USPQ2d 1056 (Fed.Cir. 1990); and *In re Geisler*, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997).

Response to Arguments

Applicants’ argue that Kimura does not contain hydroxyl or alkoxy functional groups in the silicone resin and the silicone resin does not coat the powders. In response, Kimura et al. teaches a cosmetic composition comprising a silicone resin, a polysilesquioxane of $R^1Si(O)_{1.5}$ units, Kanemaru et al. teaches a cosmetic powder coated with a silicone compound and polymerizing the silicone on the surface thereof by heat treatment and Halloran et al. teaches a cosmetic composition such as hair treating composition comprising silesquioxane polymers with hydroxyl and alkoxy groups. Halloran et al. teach that the interpenetrating polymer network contains a silesquioxane polymer consisting of $RSiO_{1.5}$ and hydroxyl, alkoxy derivatives. Kimura and Kanemura references in combination teach a cosmetic powder composition, the powder phase being coated with silicone polymers. Halloran is added to show that cosmetic composition comprising silesquioxane polymers can have hydroxyl and alkoxy group

derivatives. Hence the references in combination teach the claimed cosmetic powder coated with silicone resin and Halloran teach cosmetic composition comprising silsesquioxane polymers with hydroxyl and alkoxy derivative groups. One of ordinary skill in the art would have been motivated to add hydroxyl and alkoxy groups to silsesquioxane polymers in expectation of success because Halloran teaches the use of silsesquioxane polymers with hydroxyl and alkoxy groups in the cosmetic composition.

Applicants' argue that in Kanemaru monomers are polymerized in situ in contrast to claim 1 of the present application where the powder phase is individually coated by a still preformed silsesquioxane polymer. In response, the claims are directed to a product and not for a process. The final product obtained by Kanemaru is a coated cosmetic powder with silsesquioxane polymers. Kanemaru in fact teaches the coated cosmetic powder with silsesquioxane polymers and further teach that the coating composition enable stability of the products

Applicants' argue that the in situ polymerization process of Kanemaru leads to a cosmetic composition that contains hydrogen on the surface of the silicon treated powder. In response there is no limitation in the claims of the instant invention that the cosmetic composition does not contain any hydrogen on the surface and the instant invention is directed towards a cosmetic powder coated with silsesquioxane polymers.

Applicants' argue that Halloran composition is formed by three essential components: a solvent, and two polymers which form the interpenetrating polymer and the composition is in the gel or lotion or solution phase and not powder phase as claimed. In response, Halloran has been used to show that silsesquioxane polymers with

hydroxyl and alkoxy derivatives can be used in a cosmetic composition. Hence it would have been obvious to one of ordinary skill in the art at the time of the invention that silsesquioxane polymers with hydroxyl and alkoxy derivatives can be incorporated in a cosmetic composition. One having ordinary skill in the art would have expected success in formulating such a cosmetic composition from the teachings of Halloran. Applicants' argue that the instant invention claims a specific range of the hydroxyl or alkoxy content and Halloran does not teach any specific range of such derivatives. As stated in the rejection it would have been obvious to one of ordinary skill in the art to routinely optimize the workable ranges when general conditions of a claim are disclosed.

Conclusion

No Claims are allowed.

The rejections from the previous office action have been maintained.
Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Umamaheswari Ramachandran whose telephone number is 571-272-9926. The examiner can normally be reached on M-F 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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